

Abstract of the Disclosure

The invention provides a device for measuring the pressure of a tire.  
The device comprises a microcontroller configured to calculate a target  
5 pressure, a pressure sensor coupled to the microcontroller for measuring  
an internal pressure of the tire, a first temperature sensor coupled to the  
microcontroller for measuring an internal temperature of the tire, a user  
input coupled to the microcontroller for inputting a recommended  
pressure for the tire, a second temperature sensor coupled to the  
10 microcontroller for measuring an ambient temperature, and, a display  
coupled to the microcontroller for indicating the internal pressure of the  
tire and the target pressure. The microcontroller converts the  
recommended pressure into the target pressure based on a ratio of the  
internal temperature in Kelvin to the ambient temperature in Kelvin,  
15 such that a user is able to inflate and deflate the tire until the display  
indicates that the internal pressure is equal to the target pressure.